MULTIMEDIA UNIVERSITY

STUDENT ID NO.

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2015 / 2016 SESSION

PPE0035 – PRINCIPLES OF MICROECONOMICS

(Foundation in Management)

8th March 2016
9am to 11am
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 11 pages.
2. Answer **ALL** the questions in **Sections A and B**.
3. Shade your answers for **Section A** on the OMR sheet. Write your answers for **Section B** in the Answer Booklet.

SECTION A : MULTIPLE-CHOICE QUESTINS [50 MARKS]

Instructions: Answer **ALL** questions in this section. Shade your answers on the **OMR** sheet.

1. Economics is primarily the study of _____.
   A. how scarcity can be eliminated
   B. how firms manipulate prices
   C. how government influences resource allocation decisions
   D. the problem of scarce resources relative to human wants

2. A microeconomist would most likely study _____.
   A. how consumers respond to a change in gasoline prices
   B. the effects of an income tax reduction on the size of the national budget deficit
   C. the effects of aggregate consumer debt on overall consumption spending
   D. the relationship between the size of the money supply and the rate of inflation

3. The negative slope of the production possibilities curve illustrates that _____.
   A. some resources are always unemployed
   B. when resources are fully employed, an economy can produce more of one thing only by producing less of something else
   C. opportunity costs are constant
   D. businesses can sell more goods when their prices are low

4. When an economist says that the demand for product has increased, this means that _____.
   A. quantity demanded is greater at each possible price
   B. firms make less of the product available for sale
   C. consumers respond to a lower price by buying more
   D. the demand curve becomes steeper

5. If consumer incomes increase, the demand curve for product Y _____.
   A. will necessarily remain unchanged
   B. will shift to the right if Y is a complementary good
   C. will shift to the right if Y is a normal good
   D. will shift to the right if Y is an inferior good

6. Goods X and Y are complements while goods X and Z are substitutes. If the supply of good X increases, _____.
   A. the demand for both Y and Z will increase
   B. the demand for Y will increase while the demand for Z will decrease
   C. the demand for Y will decrease while the demand for Z will increase
   D. the demand for both Y and Z will decrease

Continued...

7. The basic formula for the price elasticity of demand coefficient is _____.
   A. absolute decline in quantity demanded/absolute increase in price
   B. percentage change in quantity demanded/percentage change in price
   C. absolute decline in price/absolute increase in quantity demanded
   D. percentage change in price/percentage change in quantity demanded

8. The cross elasticity of demand between two goods is reported to be +0.2. This implies that _____.
   A. a 2% increase in the price of one shifts the demand curve for the other to the left by 1%
   B. the two goods are complements
   C. the two goods are substitutes
   D. both goods are normal goods

9. James enjoys having either a peanut butter sandwich or a bologna sandwich for his lunch. A drop in the price of peanut butter increases the marginal utility per dollar of peanut butter and causes James to buy more peanut butter and less bologna to restore maximum utility. This best illustrates the _____.
   A. law of diminishing marginal utility
   B. income effect
   C. substitution effect
   D. law of increasing total utility

10. Suppose the price of an iced coffee is $4 and the price of a candy bar is $2. In order to maximise total utility, a consumer who buys some of each should allocate purchases such that _____.
   A. the marginal utility of each good is the same
   B. the marginal utility of an iced coffee is half that of a candy bar
   C. the marginal utility of an iced coffee is twice that of a candy bar
   D. the total utility of an iced coffee is half that of a candy bar

11. Louis received 80 total units of utility from the first four chips he consumed. If the marginal utilities of the first, second, and third chips are 20, 25, and 20, respectively, the marginal utility of the fourth chip is _____.
   A. 65 units of utility
   B. 20 units of utility
   C. 15 units of utility
   D. unknown, since Louis's utility does not conform to the usual rules

12. The price of apples decreases and Joshua responds by buying more apples and fewer oranges. Accordingly, the _____.
   A. marginal utility of both apples and oranges will decrease
   B. marginal utility of both apples and oranges will increase
   C. marginal utility of apples will increase and the marginal utility of oranges will decrease
   D. marginal utility of apples will decrease and the marginal utility of oranges will increase

Continued...

13. Suppose that as the price of Y falls from $2.00 to $1.90 the quantity of Y demanded increases from 110 to 118. Then the price elasticity of demand is _____.
    A. 4.00
    B. 2.09
    C. 1.37
    D. 3.94

14. The demand for a product is inelastic with respect to price if _____.
    A. consumers are largely unresponsive to a per unit price change
    B. the elasticity coefficient is greater than 1
    C. a drop in price is accompanied by a decrease in the quantity demanded
    D. a drop in price is accompanied by an increase in the quantity demanded

15. If the income elasticity of demand for margarine is −3.00, this means that _____.
    A. margarine is a substitute for butter
    B. margarine is a normal good
    C. margarine is an inferior good
    D. more margarine will be purchased when its price falls

16. The formula for cross elasticity of demand is percentage change in _____.
    A. quantity demanded of X/percentage change in price of X
    B. quantity demanded of X/percentage change in income
    C. quantity demanded of X/percentage change in price of Y
    D. price of X/percentage change in quantity demanded of Y

17. Suppose Alice receives 123 utils from consuming one hamburger and 50 utils from consuming a second hamburger. What is the marginal utility of the second hamburger?
    A. 73 utils
    B. 50 utils
    C. 0 utils
    D. 173 utils

18. Which of the following is **TRUE**?
    A. Marginal utility is the same as total utility
    B. It is possible for total utility to rise as marginal utility falls
    C. It is possible for marginal utility to rise as total utility falls
    D. B and C

19. Diamonds are more expensive than water because _____.
    A. they have fewer uses
    B. they yield higher total utility
    C. they yield higher marginal utility
    D. markets do not always reflect value

Continued...

20. Assume Sally is initially in equilibrium and that X and Y are normal goods for her. Then the price of X rises. For Sally to move to a new equilibrium point her consumption of _____.
    A. X must increase
    B. X must decrease
    C. both X and Y must increase
    D. X must remain constant, but her consumption of Y must increase

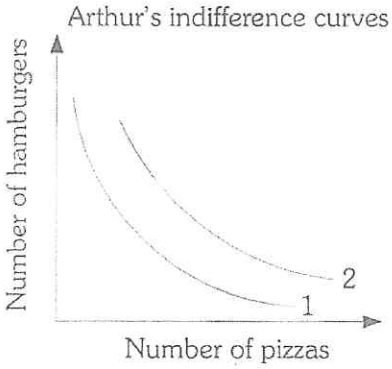

Exhibit 1

21. Refer to ***Exhibit 1***. If Arthur moves from indifference curve 1 to indifference curve 2, then Arthur's _____.
    A. total utility increases
    B. total income decreases
    C. marginal utility increases
    D. prices of the goods increase

22. We derive the demand curve for X from indifference curves and a budget constraint by changing the _____.
    A. price of X
    B. level of income
    C. consumers' preferences
    D. none of the above

23. The budget constraint cuts the horizontal axis at 12 units of good X and it cuts the vertical axis at 20 units of good Y. If the price of good X is RM20 and the price of good Y is RM12, then what does income equal?
    A. RM200
    B. RM240
    C. RM520
    D. RM280

Continued...

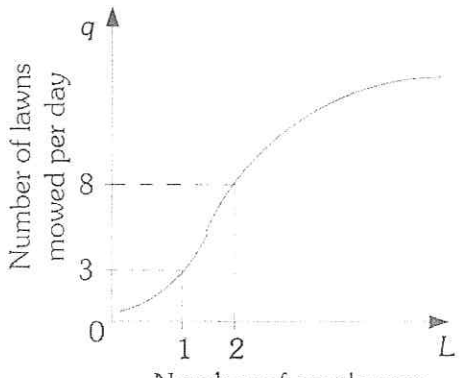

Exhibit 2

24. Refer to ***Exhibit 2*** for the total product curve. The marginal product of the second worker is _____ lawns mowed.
    A. 4
    B. 5
    C. 5.5
    D. 11

25. Refer to ***Exhibit 2***. The average product of the second worker is _____ lawns mowed.
    A. 4
    B. 5
    C. 5.5
    D. 11

26. Fixed costs _____.
    A. do NOT exist in the long run
    B. depend on a firm's level of output
    C. are zero if a firm produces no output
    D. are total costs minus average variable costs

27. Which statement is NOT true? Variable costs are _____.
    A. zero if output is zero
    B. constant as output increases
    C. equal to total costs in the long run
    D. equal to the product of average variable cost and the output level

28. The Lone Ranger, a landscaping company, has total costs of RM5,000 and total variable costs of RM1,000. The Lone Ranger's total fixed costs are _____.
    A. RM0
    B. RM4,000
    C. RM6,000
    D. indeterminate because the firm's output level is unknown

Continued...

29. As output increases in the short run, _____.
    A. marginal cost remain unchanged
    B. the difference between total cost and average variable cost decreases
    C. the difference between average total cost and average variable cost decreases
    D. All of the above are correct

30. In the short run when the marginal product of labour _____, the marginal cost of an additional unit of output _____.
    A. falls; falls
    B. rises; rises
    C. rises; falls
    D. falls; doesn't change

31. The long run average total cost (LRATC) curve shows the _____.
    A. lowest unit cost at which the firm can produce any given level of output
    B. lowest marginal cost at which the firm can produce any given level of output
    C. highest average fixed cost at which the firm can produce any given level of output
    D. lowest average variable cost at which the firm can produce any given level of output

32. Which of the following is an implicit cost?
    A. Brown pays the bill he received
    B. William pays his income taxes on June 30
    C. John pays RM100 to his supplier for the ingredients bought
    D. Smith, who could work for someone else, works for himself

33. Marginal revenue is the _____.
    A. ratio of total revenue to quantity
    B. difference between total revenue and total costs
    C. additional profit the firm earns when it sells an additional unit of output
    D. additional revenue that a firm takes in when it increases output by one additional unit

34. Assume DCC Enterprise operates in a perfectly competitive market producing 5,000 unit of good X per day. At this output level, price exceeds the firm's marginal costs and average variable costs. It follows that producing one more unit of good X will cause this firm's _____.
    A. profits to increase
    B. profits to decrease
    C. total cost to decrease
    D. profits to remain unchanged

Continued...

35. A firm in a perfectly competitive industry produces its profit-maximising quantity, 40 units. Industry price is RM3, total fixed costs are RM45, and total variable costs are RM60. The firm's economic profit is _____.
    A. RM15
    B. RM30
    C. RM35
    D. RM60

36. A perfectly competitive firm will earn positive economic profits in the range of output for which the firm's price is _____ its minimum average total cost.
    A. below
    B. above
    C. equal to
    D. below its marginal cost

37. A firm's short run supply curve is part of which of the following curves?
    A. Marginal cost
    B. Marginal revenue
    C. Average total cost
    D. Average variable cost

38. Characteristics of a monopoly include:
    A. Many seller of its product
    B. product does not have close substitutes
    C. generates large economic profits
    D. is located in a small geographic market

39. When a natural monopoly exists, it is _____.
    A. never more cost effective for one firm to produce the product
    B. never more cost effective for two or more private firms to produce the product
    C. always more cost effective for government owned firms to produce the product
    D. always more cost effective for two or more private firms to produce the product

40. For a monopolist, when does marginal revenue exceed demand?
    A. Never
    B. When price is subject to the Law of demand
    C. When output is less than profit maximising output
    D. When output is greater than profit maximising output

41. Excessive monopoly profits cause _____.
    A. a deadweight loss
    B. a decrease in total surplus
    C. a decrease in consumer surplus
    D. all of the above

Continued...

42. A firm cannot price discriminate if it _____.
    A. is regulated by the government
    B. operates in a perfect competitive market
    C. faces a downward sloping demand curve
    D. has perfect information about consumers' demand

43. One difference between a perfectly competitive firm and a monopoly firm is _____.
    A. a monopoly firm is resource allocative efficient but a perfectly competitive firm is not
    B. a perfectly competitive firm maximises profit by producing the quantity of output at which MR=MC, and the monopoly firm does not
    C. the demand curve and the marginal revenue curve are the same for the perfectly competitive firm, but they are not the same for the monopoly firm
    D. all of the above

44. The perfectly competitive firm produces the quantity of output at which _____, and the single-price monopolist produces the quantity of output at which _____.
    A. P=MC; P>MC
    B. P>MC; P=MC
    C. P=MC; P<MC
    D. P<MC; P=MC

45. The assumptions that monopolistic competition have in common with perfect competition include _____.
    A. easy entry and exit
    B. both are price makers
    C. the production of a homogeneous product
    D. a perfectly elastic demand for the firm's product

46. In general, long run equilibrium for the monopolistic competitor is where _____.
    A. price is greater than marginal cost
    B. price is equal to average total cost
    C. marginal revenue equals marginal cost
    D. all of the above

47. When a new firm enters a monopolistically competitive market, the individual demand curves faced by all existing firms in that market will _____.
    A. shift to the left
    B. shift to the right
    C. remain unchanged
    D. shift in an unpredictable direction

Continued...

48. In the long run, a monopolistically competitive firm produces a quantity _____.
    A. equal to the efficient scale
    B. less than the efficient scale
    C. greater than the efficient scale
    D. none of the above

49. According to the kinked demand curve theory, firms _____ a price cut and _____ a price increase.
    A. ignore; follow
    B. ignore; ignore
    C. follow; ignore
    D. follow; follow

50. According to the kinked demand curve theory, in an oligopolistic market structure, _____.
    A. if a firm raises its price, other firms will raise their prices
    B. if a firm lowers its price, other firms will not lower their prices
    C. the portion of a firm's demand curve above current price is highly elastic
    D. the portion of a firm's demand curve above current price is highly inelastic

SECTION B: STRUCTURED QUESTIONS [50 MARKS]

Instructions: Answer **ALL** questions in this section. Write your answers in the Answer Booklet.

Question 1

Part A

Assuming that you are choosing between two goods, X andY to consume. Your marginal utility from each is as shown in ***Exhibit 3.***

Quantity of good X	Marginal utility of good X	Quantity of good Y	Marginal utility of good Y
1	10	1	8
2	8	2	7
3	6	3	6
4	4	4	5
5	3	5	4
6	2	6	3

Exhibit 3

Given that your income is RM9 and the prices of X and Y are RM2 and RM1, respectively,

a) Calculate the marginal utility per price ratio for good X and good Y.

(3 marks)

Continued...

b) How many units of good X and good Y should you consume in order to maximise your total utility? Why?

(3 marks)

c) At the combination of good X and good Y that you have selected in (b), how much is your total utility?

(2 marks)

d) Assume that, other things remaining unchanged, the price of X falls. How should you adjust your consumption bundle to restore your equilibrium?

(2 marks)

Part B

Given the following information:

Income = RM200; Price of X = RM10; Price of Y = RM5

a) Sketch a budget line with good X on the x-axis and good Y on the y-axis. Calculate the slope of the budget line.

(4 marks)

b) Show a point on the diagram that you sketched in (a) to reflect the choice of a consumer who chooses to consume only good Y. Label it as "M"

(1 mark)

c) Show a point on the diagram that you sketched in (a) to reflect the choice of a consumer who chooses not to spend her entire income. Label it as "N"

(1 mark)

d) Draw an indifference curve on the budget line that you have sketched in (a) to depict the consumer's optimum consumption point. Label it as "K". Explain the condition that must be met in order for the consumer to be at the optimum consumption point.

(4 marks)

[TOTAL 20 MARKS]

Question 2

Part A

Exhibit 4 depicts the number of chairs produced by Rozi Furniture as the number of labour is varied.

Labour	Total product (Chairs per day)
0	0
1	20
2	44
3	60
4	72

Exhibit 4

a) Calculate the marginal product and average product for labour

(4 marks)

Continued...

b) Over what range of workers do you see increasing marginal returns? Over what range of workers do you see diminishing marginal returns?

(2 marks)

c) Explain the Law of Diminishing Marginal Returns.

(2 marks)

Part B

Suppose at output 200, average total cost (ATC) is RM50 and marginal cost (MC) is RM20. Is the firm producing at an output level at which average total cost is increasing or decreasing? Sketch a diagram to explain the relationship between ATC and MC.

(7 marks)

[TOTAL 15 MARKS]

Question 3

Exhibit 5 depicts the costs associated with a wheat farm operating in a perfect competitive market. The price for per acre of wheat farmed is RM750. Total fixed cost is RM100.

Quantity (acres)	Total cost (RM)
1	500
2	1250
3	2500
4	4250
5	6500
6	9250

Exhibit 5

a) Calculate the total revenue for different number of acres farmed.

(3 marks)

b) Calculate the marginal revenue and marginal cost of wheat farming.

(4 marks)

c) Based on MC=MR approach, how many acres of wheat should be farmed to maximise the profit? Explain.

(3 marks)

d) In the long run, is it possible for the farm above to gain economic profit? Explain.

(5 marks)

[TOTAL 15 MARKS]

End of paper